#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 7 July 2005 (07.07.2005)

**PCT** 

# (10) International Publication Number WO 2005/062473 A1

- (51) International Patent Classification<sup>7</sup>: H03M 13/29, H04L 1/00
- (21) International Application Number:

PCT/NL2003/000924

(22) International Filing Date:

23 December 2003 (23.12.2003)

(25) Filing Language:

English

(26) Publication Language:

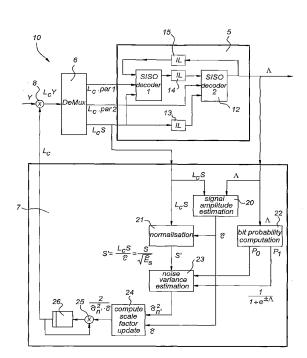
English

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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

#### (54) Title: TURBO DECODING WITH ITERATIVE ESTIMATION OF CHANNEL PARAMETERS



(57) **Abstract:** Method and decoding device for decoding a convolutionally coded input data signal y. The input data signal is multiplied with a scaling factor  $L_c(8)$  and then demultiplexed (6). The demultiplexed input data signal  $L_cS$  is then turbo decoded (5) in order to obtain decoder output likelihood ratio data  $\Lambda$ . The scaling factor  $L_c$  is updated (7) for a next iteration in dependence on a combination of a posteriori likelihood data based on turbo decoded output data  $\Lambda$  and a priori likelihood data based on the demultiplexed signal  $L_cS$ .

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#### Published:

with international search report

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